This document is scheduled to be published in the Federal Register on 11/04/2020 and available online at **federalregister.gov/d/2020-24437**, and on **govinfo.gov**

DEPARTMENT OF TRANSPORTATION

Federal Highway Administration

[Docket No. FHWA-2020-0023]

Agency Information Collection Activities: Request for Comments for a New Information Collection

AGENCY: Federal Highway Administration (FHWA), DOT.

ACTION: Notice and request for comments.

SUMMARY: The FHWA invites public comments about our intention to request the Office of Management and Budget's (OMB) approval for a new information collection, which is summarized below under **Supplementary Information**. We are required to publish this notice in the **Federal Register** by the Paperwork Reduction Act of 1995.

DATES: Please submit comments by (please insert date 60 days from published date).

ADDRESSES: You may submit comments identified by DOT Docket ID Number 2020-0023 by any of the following methods:

Web Site: For access to the docket to read background documents or comments received go to the Federal eRulemaking Portal: Go to http://www.regulations.gov. Follow the online instructions for submitting comments.

Fax: 1-202-493-2251.

Mail: Docket Management Facility, U.S. Department of Transportation, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590-0001.

Hand Delivery or Courier: U.S. Department of Transportation, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue S.E., Washington, DC 20590, between 9 a.m. and 5 p.m. ET, Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: Allen Greenberg, Allen.Greenberg@dot.gov or 202-366-2425, Office of Transportation Management, Federal Highway Administration, U.S. Department of Transportation, 1200 New Jersey Avenue, SE., Washington, DC 20590. Office hours are from 8 a.m. to 5 p.m., Monday through Friday, except Federal holidays.

SUPPLEMENTARY INFORMATION:

Title: Data Collection for Smartphone Travel Incentives Study

Background: This study seeks to gain a deeper understanding of the factors influencing individual travel decisions at different times and for a range of trip purposes. Of primary interest is learning about participants weighing of travel options that have differing congestion impacts and, if participants consider but do not ultimately choose an option with low congestion impacts, to engage in a discovery process to ascertain the degree to which certain types and levels of encouragement and incentives could influence decision making. Such knowledge will help FHWA and state and local transportation departments to offer transportation services and engage the public in ways that minimize congestion and better serve travelers.

Up to 7,500 volunteers, in total, would be recruited from up to 15 cities to participate in this study for a period of not more than two years for the purpose of testing the impacts of a range of personal interventions on travel behavior. Participants may be surveyed at the beginning of the study. Such a general survey may include questions related to demographics (to ensure population representation and to learn about different views and impacts on different population segments); travel preferences and habits; familiarity and comfort with and views about different

transportation modes; and perceptions of travel related trade-offs.

Through a smartphone application, trips would be tracked with user consent, and strong user privacy protocols would be followed. A small control group would occasionally be surveyed about their travel opinions and preferences, but otherwise would just have their travel observed without intervention. A hierarchy of engagement techniques would be deployed for other participants, starting first with information, followed by prompts to take an action, and then with incentives. Messages, action prompts, and incentives would be designed to encourage users to make more system-efficient travel choices. By continuously observing travel behaviors, changes in behavior may be linked to specific engagement techniques.

The first stage of information engagement would entail providing users "information tiles" where the general advantages to users of shifting travel times and/or modes that would reduce their congestion impacts on the system are highlighted to them. The second stage of information engagement would entail providing users "action tiles" where very specific actions they could take, reflective of recent travel choices they had made, would be shown on the smartphone application along with the associated benefits to them (e.g., anticipated travel time-savings for shifting departure time to 30 minutes earlier than normal, or one or two specific bus departure times and routes that may serve as a reasonable substitute for a drive-alone trip and allow the participant to use his or her commute time more efficiently). After either the first or second stage of information engagement, participants may soon thereafter be given a very brief in-app, follow-up survey asking about whether they would be willing to consider trying the alternative or alternatives. The degree of additional surveying a participant would face would be based on their responses to information engagement, with those who are less responsive being queried more frequently. If neither of these information-providing techniques leads to an observed travel behavior change, an "incentive treatment" would then be tested.

The incentive treatment may entail a participant being presented one or more additional travel choices that would reduce congestion as compared to the participant repeating an earlier-observed travel departure time or mode, or a user being asked to declare a second and perhaps even a third choice travel option, and if either or both of their second or third choice is more system efficient than the first choice, ascertaining what level of incentive the user would require to make the switch.

To understand the strength of participant preferences, and to ascertain the level of incentive required to change the order of preferences, a reverse auction mechanism with a randomly generated award (RGA) amount (limited to, say, between 1 cent and $10) may be deployed. In this instance, a user would be queried about their willingness to accept (WTA) payment requirement amount to move from their first choice to their second choice and/or to their third choice travel mode(s) or departure time, if these choices would cause less congestion than their first choice. If the user's WTA compensation requirement is lower than the RGA payment amount, then they would be given the RGA payment in exchange for shifting to their second or third choice travel mode or departure time. If the RGA payment amount is lower than their WTA compensation requirement, then the user would continue with his or her first choice and receive no award.

The above approach is particularly advantageous from a data gathering standpoint, as the users communicate their precise WTA compensation to make a change for each trip, rather than the WTA having to be estimated/modeled after the user responds to being given different award offers over many different trips. With such an unfamiliar approach, users would need to be taught how the awards work and convinced (correctly) that bidding their actual WTA is always the best strategy. To ensure that users understand how such bidding may work, they may be asked "quiz type" questions after the strategy is described and corrected if user responses indicate a lack of understanding.

When users make a change in travel mode or departure time in response to the study, an in-app micro survey around the specific trip taken may be administered, such as to confirm travel mode(s), to discern satisfaction, and to assess if users believe that in the future they will repeat any travel choice change that they had made.

So that the choice set presented is personally relevant to individuals, users may be enabled/encouraged to customize the output from their app to exclude choices/services that they never want to use (whether riding bikeshare if they are not able to or comfortable bicycling, driving their own car if they do not own one, using vehicles from a carsharing company if they have not and do not plan to sign up for such a service, or taking the bus if they simply refuse to do so under any circumstance). Further, machine learning could enable the application to present options the user is more likely to see as attractive under specific trip circumstances (e.g., focusing on transit for commute trips while TNC options for late-night trips).

The application might add a proactive feature to enable and encourage users to indicate within the app their desired travel destination(s), departure time, and mode. Such a feature may be especially important to learn more about users whose trip patterns are quite varied, thereby making it difficult for the study team to predict what trips might be repeated and thus what specific messages should be communicated and for what trips WTA incentives should be offered. Here, participants planning to travel at a time or in a manner that would mean they will be substantially contributing to congestion would be randomly assigned to one of a few different groups within the study. The "no treatment" group within the proactive feature might just receive an in-app response note saying: "Thanks for letting us know. Have a good trip." The study interest in this group is to ascertain whether the trip is taken as planned. The proactive feature would not include an "information tile" group, as it would not be expected that someone with a specific travel intention would make a change after a somewhat generic positive statement is communicated about an alternative without the needed practical details about using the alternative

for the specific trip also being presented. There would be an "action tile" treatment group that would be presented with a range of travel departure and mode choice alternatives that would have reduced congestion impacts to what the user indicated was his or her travel plan, along with costs and estimated travel times associated with the different alternatives. Perhaps, too, users would be provided within the app the ability to book such a trip, such as with a transportation network company (TNC) or through the organization of a real-time carpool. The action tiles presented to this group may be tailored to individuals based upon their previous survey responses and/or reported/observed travel behaviors. A third group would also be presented the information about trip alternatives contained in the action tiles, and then would be assigned to the WTA survey and treatment, as described above.

Learnings about the effects of the various treatments on individual travel decisions would expand the knowledge and tools available to policy makers to further engage travelers by providing information and offering incentives that are shown to yield more system-efficient travel choices. This will enable an assessment of the expected impacts of city or metropolitan level policy scenarios to encourage the use of apps that offer real-time travel information about a range of alternatives, and provide incentives such as through public-private partnerships (PPPs) that encourage travel choices that reduce congestion.

Respondents: As noted above, up to 7,500 total field-test participants nationwide would be recruited from up to 15 cities.

Frequency: One time collecton.

Estimated Average Burden per Response: Approximately 20 minutes prior to field testing, 1 hour and 30 minutes during field testing and 15 minutes as the participant exits field-testing. Approximately 2 hours and 5 minutes per participant in total is anticipated over the 2-year study.

Estimated Total Annual Burden Hours: Approximately 15,625 hours in total is estimated. Significantly, many travel options presented to participants will save them time over alternatives (especially if trip times are shifted to avoid congestion), and thus many participants are expected to experience net time savings. All participation is voluntary, and some participants will be offered compensation.

Public Comments Invited: You are asked to comment on any aspect of this information collection, including: (1) Whether the proposed collection is necessary for the FHWA's performance; (2) the accuracy of the estimated burdens; (3) ways for the FHWA to enhance the quality, usefulness, and clarity of the collected information; and (4) ways that the burden could be minimized without reducing the quality of the collected information. The agency will summarize and/or include your comments in the request for OMB's clearance of this information collection.

Authority: The Paperwork Reduction Act of 1995; 44 U.S.C. Chapter 35, as amended; and 49 CFR 1.48.

Issued On: October 30, 2020.

Michael Howell,
Information Collection Officer.

[FR Doc. 2020-24437 Filed: 11/3/2020 8:45 am; Publication Date: 11/4/2020]